



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/051,664      | 01/17/2002  | Samuel I. Brandt     | 2001P16949 US01     | 1208             |

7590 05/19/2005

Elsa Keller  
Intellectual Property Department  
Siemens Corporation  
186 Wood Avenue South  
Iselin, NJ 08830

|          |
|----------|
| EXAMINER |
|----------|

ROBINSON BOYCE, AKIBA K

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

3639

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/051,664

Applicant(s)

BRANDT ET AL.

Examiner

Akiba K Robinson-Boyce

Art Unit

3639

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/25/05 has been entered.

### ***Status of Claims***

2. Due to communications filed 2/25/05, the following is a non-final office action. Claims 1, 11, and 26 are currently amended. Claims 28 and 29 have been added. Claims 1-29 are pending in this application and have been examined on the merits. Claims 1-29 are rejected as follows.

***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-25 and 28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to a non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of :

(1) whether the invention is within the technological arts; and

(2) whether the invention produces a useful, concrete, and tangible result.

5. For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the “progress of science and the useful art” (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim, the recited process must somehow apply, involve, use, or advance the technological arts.

In the present case, claim 1 is directed to a method for processing an event representing a change in circumstances potentially affecting healthcare delivered to a patient. Claim 1 recites the steps of “associating in a repository...”, “receiving a message...”, “determining by using said repository...”, and “initiating scheduling of a performance”. These steps do produce a tangible result, however they represent mere ideas in the abstract since they do not recite computer software or hardware embedded on a tangible medium for processing the steps of this claim. Since no computer

software or hardware embodied on a tangible medium is present in this claim, this claim and all claims that depend from this claim (Claims 2-10) are therefore found to be non-statutory.

In the present case, claim 11 is directed to a method for processing an event representing a change in circumstances potentially affecting healthcare delivered to a patient. Claim 11 recites the steps of "associating in a repository...", "receiving a message...", "determining by using said repository...", " providing said parameter to said particular process...", and "initiating scheduling of a performance". These steps do produce a tangible result, however they represent mere ideas in the abstract since they do not recite computer software or hardware embedded on a tangible medium for processing the steps of this claim. Since no computer software or hardware embodied on a tangible medium is present in this claim, this claim and all claims that depend from this claim (Claims 12-19) are therefore found to be non-statutory.

In the present case, claim 20 is directed to a method for processing an event representing a change in circumstances potentially affecting healthcare delivered to a patient. Claim 20 recites the steps of "associating in a repository...", "receiving a message...", "acquiring said parameter associated with said event...", and "adapting said instance of said second process...". These steps do produce a tangible result, however they represent mere ideas in the abstract since they do not recite computer software or hardware embedded on a tangible medium for processing the steps of this claim. Since no computer software or hardware embodied on a tangible medium is

present in this claim, this claim and all claims that depend from this claim (Claims 21-25) are therefore found to be non-statutory.

In the present case, claim 28 is directed to a method for processing an event representing a change in circumstances potentially affecting healthcare delivered to a patient. Claim 28 recites the steps of "associating in a repository...", "receiving a message...", "determining by using said repository...", "initiating scheduling of a performance", and "in response to examining predetermined information and said occurrence of said identified event, substituting...". These steps do produce a tangible result, however they represent mere ideas in the abstract since they do not recite computer software or hardware embedded on a tangible medium for processing the steps of this claim. Since no computer software or hardware embodied on a tangible medium is present in this claim, this claim is therefore found to be non-statutory.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 2, 3, 6, 9-13, 19-23, 26, 27, 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Schloss et al (US 5,692,125).

As per claims 1, 28, Schloss et al discloses:

Associating in a repository, at least one event potentially affecting healthcare delivered to a patient with a sequence or tasks to be performed to support healthcare delivery to said patient, (Col. 5, lines 28-29, where the database is the repository and the events in the event groups are the tasks, w/ Col. 5, lines 45-54, where event 1 and event 2 in the event group are the tasks, w/ col. 3, lines 50-53, where it is shown that an event group is one or more events that are logically related in some sequential order).

receiving a message identifying occurrence of said event, (Col. 4, lines 43-44, sending a message to prompt performance of an event);

in response to said occurrence of said identified event, determining, by using said repository, a particular sequence of tasks to be performed, in response to receiving said message identifying occurrence of said event, (col. 4, lines 45-53, receiving one or more message detailing events like administering medication to one or more patients where it is shown that conditions must be honored in scheduling the sequence of events (event 1, then event 2), also col. 14, lines 51-55, shows one or more events to be scheduled where the event is analogous to a task since the event is being performed]); and

initiating scheduling of performance of said particular sequence of tasks by at least one individual in response to receiving said message identifying occurrence of said event and determination pre-conditions associated with said task sequence are satisfied and said task of said task sequence are ready for performance by said at least one individual, (Col. 4, lines 48-54, shows that event 1 performed at time 256, also col.

14, lines 62-67, shows a scheduler executed to schedule, Col. 5, lines 11-15, shows that the performance of specific tasks are mapped);

in response to examining predetermined information and said occurrence of said identified event, substituting at least one of said particular tasks for a task of an existing scheduled task sequence, (col. 2, lines 35-43, checking if dynamic conditions are satisfied, and if not satisfied, modifying the event(s)).

As per claim 2, Schloss et al discloses:

Substituting at least one of said particular tasks for a task of an existing scheduled task sequence, (Col. 8, lines 27-29, an event containing pointers to immediately previous events).

As per claim 3, Schloss et al discloses:

Said message includes an event identifier identifying said event and is generated by a second process comprising a second set of tasks, (Col. 4, lines 42-44, nurse receiving messages detailing events, w/ col. 7, lines 55-59, shows events in event group template are linked to header identifiers, col. 8, lines 27-35, shows how events are linked in a precedence/subsequence link, and shows event A pointing to event B); and

receiving an identifier identifying a particular instance of said first process, (col. 8, lines 21-22, shows that each event in an event group requires an identifier).

As per claims 6, 19, 27, Schloss et al discloses:

Associating in a repository, said event with a process instance identifier identifying an instance of said process comprising said sequence of tasks/said at least one repository associates said at least one event with a process instance identifier



identifying an instance of a process comprising said sequence of tasks, (col. 7, lines 55-59, event group template where the pointer links to the header identifier).

As per claim 9, Schloss et al discloses:

said event comprises at least one of, (a) an event resulting from action by healthcare personnel, (b) an event generated by an operating process, (c) an event generated by patient monitoring equipment and (d) an event generated by a medical device, (col. 7, lines 55-59, [physician prescribing vitamins]).

As per claim 10, Schloss et al discloses:

receiving information identifying a particular individual task of an existing scheduled task sequence, (Col. 12, lines 14-16, [ " Injection #1" followed by "Booster Injection"], and including the activity of adapting said existing scheduled task sequence by initiating processing of said existing scheduled task sequence from said identified particular individual task in response to occurrence of said event, (col. 12, lines 16-35, [scheduling the injections]).

As per claim 11, Schloss et al discloses:

Associating in a repository, at least one event potentially affecting healthcare delivered to a patient with a process comprising a sequence of tasks to be performed to support healthcare delivery to said patient, (Col. 5, lines 28-29, where the database is the repository and the events in the event groups are the tasks, w/ Col. 5, lines 45-54, where event 1 and event 2 in the event group are the tasks, w/ col. 3, lines 50-53, where it is shown that an event group is one or more events that are logically related in some sequential order);

receiving at least one message identifying occurrence of said event and at least one parameter associated with said event, (Col. 4, lines 43-48, [sending a message to prompt performance of an event such as administering medication to one or more patients, where the parameter is represented by a dynamic condition]);

determining by using said repository, whether said identified event is associated with a particular process of a plurality of predetermined processes, (col. 13, lines 8-17, linking events to the protocol or process);

providing said parameter to said particular process in response to said determination said identified event is associated with said particular process, (col. 8, lines 21-26, determining an event in an event group that requires an identifier, w/ col. 7, lines 55-59, shows creation of an event group template where a pointer links the events in the event group template to a header identifier, w/ col. 13, lines 8-17, linking events to the protocol or process, since events are linked to identifiers and also to the process, it is inherent for the process to be linked to the identifier as well, where the parameter is the identifier);

initiating scheduling of performance of said particular process in response to receiving said message identifying occurrence of said event and determination pre-conditions associated with said task sequence are satisfied and said task of said task sequence are ready for performance by said at least one individual, (Col. 4, lines 48-54, shows that event 1 performed at time 256, also col. 14, lines 62-67, shows a scheduler executed to schedule, Col. 5, lines 11-15, shows that the performance of specific tasks are mapped).

As per claim 12, Schloss et al discloses:

Wherein said associated parameter is for use by multiple different process task sequences and is stored at a location available for access by said multiple different process task sequences, (Fig. 2, and Col. 3, lines 40-65, [computer system where events are processed], Col. 15, lines 46-53, [event condition in data structure stored in memory]).

As per claim 13, Schloss et al discloses:

including the activity of verifying said associated parameter is compatible with predetermined value criteria as a pre-condition to providing said parameter to said predetermined process, 15, lines 54-60, [conditions must be satisfied]).

As per claim 20, Schloss et al discloses:

Associating in a repository, at least one event potentially affecting healthcare delivered to a patient with a process instance identifier identifying instance of a process comprising a sequence of tasks to be performed to support healthcare delivery to a patient, (Col. 5, lines 28-29, where the database is the repository and the events in the event groups are the tasks, w/ Col. 5, lines 45-54, where event 1 and event 2 in the event group are the tasks, w/ col. 3, lines 50-53, where it is shown that an event group is one or more events that are logically related in some sequential order, col. 7, lines 55-59, shows event group template that points to a header identifier) ;

in response to occurrence of an event in a first process, receiving at least one message identifying occurrence of said event during said first process and identifying a parameter associated with said event, (Col. 4, lines 43-48, [sending a message to

prompt performance of an event such as administering medication to one or more patients, where the message details events, w/ col. 7, lines 55-59, where it is shown that event groups can be created that contain identifiers]);

acquiring said parameter associated with said event and providing said parameter to an instance of a second process identified using said repository, (col. 8, lines 27-35, [event A pointing to event B]); and

adapting said instance of said second process by scheduling performance of particular set of tasks in response to receiving said at least one message, (col. 8, lines 35-37, [forming a precedence link and scheduling the event that forms that link]).

As per claim 21, Schloss et al discloses:

including the activity of receiving an identifier identifying a particular individual task in said second process, (col. 12, lines 14-16, ("Injection 1" followed by "booster injection"), and wherein said adapting activity comprises initiating processing of said second process from said particular individual task in response to receiving said at least one message identifying occurrence of said event an determination said parameter is within predetermined acceptability criteria, (col. 12, lines 16-35, [scheduling the injections {this includes initiating the processing of the "booster injection"}] w/ Col. 4, lines 41-54, sending a message to prompt performance of an event once dynamic conditions are checked).

As per claim 22, Schloss et al discloses:

wherein said parameter associated with said event is stored at a location available for access by said first and second processes, (col. 3, lines 40-65, and Fig. 2, [computer system where 2 events are processed]).

As per claim 23, Schloss et al discloses:

sharing data between said first and second process comprising sharing at least one of, (a) an event identifier identifying said event, (b) a process identifier identifying said first process, (c) an identifier identifying a particular instance of said first process, (Col. 8, lines 21-26, [event identifier for each event]).

As per claim 26, Schloss et al discloses:

At least one repository associating at least one event potentially affecting healthcare delivered to a patient with a sequence of tasks to be performed to support healthcare delivery to said patient, (Col. 5, lines 28-29, where the database is the repository and the events in the event groups are the tasks, w/ Col. 5, lines 45-54, where event 1 and event 2 in the event group are the tasks, w/ col. 3, lines 50-53, where it is shown that an event group is one or more events that are logically related in some sequential order);

a communication interface for receiving a message identifying occurrence of said event potentially affecting healthcare delivered to a patient, (col. 20, lines 21-22, [general purpose computer system], w/ col. 4, lines 43-45, [sending a message to prompt performance of an event]);

an event analyzer for using said at least one repository and for applying predetermined rules to interpret said identified event to determine a particular sequence

Art Unit: 3639

of tasks to be performed in response to receiving said message identifying occurrence of said identified event, (Col. 14, lines 49-56, [computer with CPU and memory for determining if event condition is satisfied])w/ col. 4, lines 41-45, shows message is sent when conditions are checked); and

a processor for initiating scheduling of performance of said particular tasks by at least one individual in response to said occurrence of said identified event and determination pre-conditions associated with said task sequence are satisfied and said task of said task sequence are ready for performance by said at least one individual, (Col. 14, lines 62-67, [scheduler], w/ col. 4, lines 41-43, shows dynamic conditions must be checked and honored before performing events, w/Col. 4, lines 48-54, shows that event 1 performed at time 256, also col. 14, lines 62-67, shows a scheduler executed to schedule, Col. 5, lines 11-15, shows that the performance of specific tasks are mapped).

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 4, 7, 8, 15-18, 24, 25 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schloss et al (US 5,692,125) as applied to claim1 above, and further in view of Judge et al (US 6,401,138).

As per claim 4, Schloss et al fails to disclose said particular instance of said first process comprises a particular use of said process for a specific patient, but does disclose the performance of an event that relates to a patient in col. 4, lines 55-60.

However, Judge et al discloses:

said particular instance of said first process comprises a particular use of said process for a specific patient, (Col. 21, lines 36-45, [using data about particular patients to issue service requests]). Judge et al discloses this limitation in an analogous art for the purpose of showing that service requests are issued for certain patients]).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention for a first process to comprise a particular use of said process for a specific patient with the motivation of initiating and completing processes specifically for each individual patient.

As per claims 7, 15, 16, Schloss et al discloses:

said message includes an event identifier identifying said event/said at least one message includes a process identifier identifying a target process to be replaced by said predetermined process, (col. 8, lines 21-22, [each event in event group will require an identifier]);

Schloss et al fails to disclose a process identifier identifying a target process to be replaced by a predetermined process comprising said particular tasks/replacing

Art Unit: 3639

scheduling of performance of another process with said scheduling of performance of said identified process, but does disclose events part of an event group that require an identifier to schedule an event in col. 8, lines 21-22, and in Col. 8, lines 27-29, an event containing pointers to immediately previous events. Since these events contain pointers to immediately previous events, it is obvious to conclude that the events are replaced by previous events.

However, Judge et al discloses:

A process identifier, (col. 9, line 13, [process ID]). Judge et al discloses this limitation in an analogous art for the purpose of showing that process can be identified by ID.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have a process identifier with the motivation of having means to retrieve a process by identifying it.

As per claims 8, 17, 18, 25, Schloss et al discloses:

And including the activity of searching a database containing records indicating active processes and process instances to identify active process instances of said target process to be replaced/receiving information identifying active process instances and storing records in a database indicating said identified active process instances, (col. 5, lines 29-30, [sending orders to the database]).

As per claim 24, Schloss et al fails to disclose wherein said at least one message includes a process identifier identifying said second process is to be modified in response to occurrence of said event in said first process, but does disclose events part



of an event group that require an identifier in col. 8, lines 21-22 and that a first event can be effected by, and modified by a second event in col. 8, lines 27-45.

However, Judge et al discloses:

A process identifier, (col. 9, line 13, [process ID]). Judge et al discloses this limitation in an analogous art for the purpose of showing that process can be identified by ID.

It would have been obvious to one of ordinary skill in the art at the time o the applicant's invention to have a process identifier with the motivation of having means to retrieve a process by identifying it.

As per claim 29, Schloss et al discloses:

Associating in a repository, at least one event potentially affecting healthcare delivered to a patient with a sequence or tasks to be performed to support healthcare delivery to said patient, (Col. 5, lines 28-29, where the database is the repository and the events in the event groups are the tasks, w/ Col. 5, lines 45-54, where event 1 and event 2 in the event group are the tasks, w/ col. 3, lines 50-53, where it is shown that an event group is one or more events that are logically related in some sequential order).

receiving a message identifying occurrence of said event, (Col. 4, lines 43-44, sending a message to prompt performance of an event);

determining, by using said repository, a particular sequence of tasks to be performed, in response to receiving said message identifying occurrence of said event, (col. 4, lines 45-53, receiving one or more message detailing events like administering medication to one or more patients where it is shown that conditions must be honored

in scheduling the sequence of events (event 1, then event 2), also col. 14, lines 51-55, shows one or more events to be scheduled where the event is analogous to a task since the event is being performed]); and

initiating scheduling of performance of said particular sequence of tasks by at least one individual in response to receiving said message identifying occurrence of said event and determination pre-conditions associated with said task sequence are satisfied, (Col. 4, lines 48-54, shows that event 1 performed at time 256, also col. 14, lines 62-67, shows a scheduler executed to schedule);

Schloss et al fails to disclose a process instance identifier identifying an instance of a process comprising said sequence of tasks, but does disclose events part of an event group that require an identifier in col. 8, lines 21-22.

However, Judge et al discloses:

a process instance identifier identifying an instance of a process comprising said sequence of tasks, (col. 9, line 13, [shows process IDs are used ] w/ Col. 13, lines 25-51 shows an example of the notification of an instance of a previously registered event out of a plurality of events in a queue where the event object for the type of event that is the subject of the notify operation is shown to be identified). Judge et al discloses this limitation in an analogous art for the purpose of showing that process instance can be identified by ID.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have a process instance identifier identifying an instance of a

process comprising said sequence of tasks with the motivation of having means to retrieve a process by identifying it.

3. Claims 5, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schloss et al (US 5,692,125) as applied to claim 1 above, and further in view of Wright et al (US 6,004,276).

As per claims 5, 14, Schloss et al fails to disclose:

filtering a plurality of received messages to identify said message identifying occurrence of an event potentially affecting healthcare delivered to a patient and excluding other messages immaterial to said healthcare delivered to said patient, but does disclose the performance of an event that relates to a patient in col. 4, lines 55-60.

However Wright et al discloses:

filtering a plurality of received messages to identify said message identifying occurrence of an event potentially affecting healthcare delivered to a patient and excluding other messages immaterial to said healthcare delivered to said patient, (col. 42, lines 37-41, [filtering]). Wright et al discloses this limitation in an analogous art for the purpose of showing that events can be filtered during a query]).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to filter a plurality of received messages to identify said message identifying occurrence of an event potentially affecting healthcare delivered to a patient

and excluding other messages immaterial to said healthcare delivered to said patient with the motivation of weeding out messages for events that are not necessary.

### ***Response to Arguments***

4. Applicant's arguments filed 2/25/05 have been fully considered but they are not persuasive.

As per claims 1, 2, 9-13, 20-23, 26 and 27, the applicant argues that Schloss et al fails to disclose the limitations of these claims.

Specifically, as per claim 1, the applicant argues that Schloss et al does not disclose "not scheduling tasks until an appropriate event message is received and "pre-conditions" are satisfied and the tasks of said task sequence are ready for performance by at least one individual". However, Schloss specifically discloses a system that schedules one or more events or event groups subject to conditions as shown in Col. 2, lines 28-29. Specifically, in Col. 2, lines 35-40, Schloss et al discloses that certain dynamic conditions are checked prior to performance. If the dynamic conditions are satisfied, the event(s) are confirmed for performance. In addition, Schloss et al discloses that the performance of an event involves sending a message to prompt the performance of the event in Col. 4, lines 43-45. In essence, performance prompting and checking/honoring dynamic conditions are done in response to sending the message in the Schloss et al patent.

As per claim 2, this claim depends from claim 1 and is rejected for the same reasons as discussed above with respect to claim 1. In addition, the applicant argues that Schloss et al does not show "in response to examining predetermined information and said occurrence of said identified event, substituting at least one of said particular tasks for a task of an existing scheduled task sequence. However, Col. 8, lines 28-29 of Schloss et al describes how an event can contain pointer(s) to immediately precedence or subsequence links. Lines 35-46 then goes on to disclose that these precedence or subsequence links are utilized so that when an adjustment is implemented, or when rescheduling an event or canceling an event, the location and use of any subsequent events that require propagation of the event rescheduling or cancellation can take place. In this case, the subsequent event is used to substitute the cancelled event for rescheduling.

As per claim 3, the applicant argues that Schloss et al does not disclose "said message includes an event identifier identifying said event and is generated by a second process comprising a second set of tasks and including the activity of also receiving an identifier identifying a particular instance of said first process" However, these features are disclosed by Schloss et al in col. 7, lines 55-59, where it is shown that events in the event group template are linked to header identifiers, and also in col. 8, lines 27-35, it is shown how events are linked in a precedence/subsequence link, and shows event A pointing to event B. The event that is linked in a subsequence link represents the second set of process/tasks. The applicant also argues that "An instance of a process is to be interpreted as a copy...of the desired event associated

particular workflow process” and that Schloss et al does not disclose this instance. The applicant also argues that Schloss also fails to show the use of an “event identifier”.

However, Miriam Webster’s Dictionary defines instance as “a step, stage, or situation viewed as part of a process or series of events”. Schloss et al shows this instance in col. 8, lines 21-22, where it is disclosed that there is at least an event in an event group. This passage also shows that each event in an event group requires an identifier. Since the event is part of the event group, it is a situation viewed as part of a series of events and therefore represents an instance.

As per claim 6, this claim is still rejected based on the same reasons as discussed above with respect to claim 3. In addition, the applicant argues that Schloss et al does not disclose “associating in a repository, said event with a process instance identifier identifying an instance of a process comprising said sequence of tasks”.

However, col. 7, lines 55-59 of Schloss et al, it is disclosed that an event group template where the pointer links to the header identifier. The template represents the repository and identification takes place when the pointer links to the header identifier.

As per claim 9, this claim depends from claim 1 and is rejected for the same reasons as discussed above with respect to claim 1.

As per claim 10, the applicant argues that Schloss et al does not disclose “receiving information identifying a particular individual task of an existing scheduled task sequence and including the activity of adapting said existing scheduled task sequence by initiation processing of said existing scheduled task sequence from said identified particular individual task in response to occurrence of said event”. However,

Schloss et al discloses this limitation in Col. 12, lines 14-16, where " Injection #1" followed by "Booster Injection" is shown which represents information identifying a particular individual task of an existing scheduled task sequence, and col. 12, lines 16-35, which shows scheduling the injections, which represents the adapting limitation. In this case, the adaption through initiation processing occurs once the Injection #1 is scheduled. The implementation of the Booster Injection represents the initiation processing of the existing scheduled task sequence and the Injection #1 represents the identified individual task, which are both part of linked events since the Booster Injection is initiated as a result of the implementation of the Injection #1.

As per claim 11, this claim is rejected for the same reasons given above with respect to claim 1.

As per claim 12, this claim is rejected for the same reasons as disclosed above with respect to claim 11. In addition, the applicant argues that the Schloss et al patent does not show "said associated parameter is for use by multiple different process task sequences". However, in Fig. 2, and Col. 3, lines 40-65, Schloss et al shows a computer system where events are processed, and in Col. 15, lines 46-53, Schloss et al shows that an event condition in data structure is stored in memory. The applicant also argues that Schloss et al provides no 35 USC 112 compliant enabling disclosure of providing global parameters " stored at a location available for access by said multiple different process task sequences. However, in Schloss et al, it is shown that when two sequences are to occur one after the other, a construction domain can be applied where a protocol for upgrading, wiring and plumbing is to be followed by a protocol for painting

and cleaning. In this case, more than one protocol is shown for use of the same event. In addition, Schloss et al shows that global restrictions can be implemented for scheduling events in col. 1, lines 42-54. In this case, the different task process sequences used to schedule a particular event follows this particular global restriction so a user can be told that a schedule of interrelated events planned are not feasible.

As per claim 13, the applicant argues that Schloss et al fails to disclose "verifying said associated parameter is compatible with predetermined value criteria as a pre-condition to providing said parameter to said predetermined process". However, Schloss et al discloses this limitation in Col. 15, lines 54-60, where conditions must be satisfied before initiating any event process. The applicant argues that Schloss et al initiates scheduling only on "fixed conditions" and not in response to dynamic conditions. However, here, it is also shown that the dynamic conditions must be satisfied at a prepare-to-perform-time before the event can be performed. This "before" time is still before the event is actually processed.

As per claim 19, this claims is rejected for the same reasons as discussed with respect to claims 3, 7, 8 and 17.

As per claim 20, this claim is rejected for the same reasons given above with respect to claim 1. In addition, the applicant argues that Schloss et al does not disclose "associating in a repository, at least one event potentially affecting healthcare delivered to a patient with a process instance identifier identifying an instance of a process comprising a sequence of tasks" and does not recognize the user of process instance identifiers. However, col. 7, lines 55-59 of Schloss et al, it is disclosed that an event



group template where the pointer links to the header identifier. The template represents the repository and association takes place when the pointer links to the header identifier. Also, in Col. 4, lines 43-48, Schloss et al describes sending a message to prompt performance of an event such as administering medication to one or more patients, where the message details events. This represents the process instance. In addition, col. 7, lines 55-59 shows that when event groups are created, they are linked to identifiers. This represents the process instance identifier. Also, as discussed above with respect to claim 3, Miriam Webster's Dictionary defines instance as "a step, stage, or situation viewed as part of a process or series of events". Schloss et al specifically shows this instance in col. 8, lines 21-22, where it is disclosed that there is at least an event in an event group. This passage also shows that each event in an event group requires an identifier. Since the event is part of the event group, it is a situation viewed as part of a series of events and therefore represents an instance.

As per claim 21, the applicant argues that Schloss et al fails to disclose "including the activity of receiving an identifier identifying a particular individual task in said second process, and wherein said adapting activity comprises initiating processing of said second process from said particular individual task in response to receiving said at least one message identifying occurrence of said event an determination said parameter is within predetermined acceptability criteria". However, this limitation is disclosed in col. 12, lines 14-16, where "Injection 1" followed by "booster injection" is shown and represents a particular individual task in a second process. In addition, Schloss et al

discloses the initiation limitation in col. 12, lines 16-35 of Schloss et al. Here, it is disclosed that the injections are scheduled which includes initiating the processing of the booster injection and sending a message to prompt performance of an event once dynamic conditions are checked in Col. 4, lines 41-54.

As per claim 22, this claim is rejected for the same reasons as disclosed with respect to claim 20.

As per claim 23, the applicant argues that Schloss et al fails to disclose "sharing data between said first and second process" However, the claim recites "sharing data between said first and second process comprising sharing *at least one of*, (a) an event identifier identifying said event, (b) a process identifier identifying said first process, (c) an identifier identifying a particular instance of said first process". Schloss et al discloses sharing of an event identifier identifying said event. Specifically, Schloss et al shows an event identifier for each event in Col. 8, lines 21-26. Schloss et al also discloses that events are logically related in sequential order in an event group in Col. 3 lines 50-53. In this case, the event identifier for each event is shared when that event is in an event group.

As per claim 26, this claim is rejected for the same reasons as disclosed above with respect to claim 1.

As per claim 27, the applicant argues that Schloss does not disclose "at least one repository" that "associates said at least one event with a process instance identifier identifying an instance of a process comprising said sequence of tasks". However, in col. 7, lines 55-59 of Schloss et al, an event group template is shown where the pointer

links to the header identifier. In addition, in Col. 4, lines 43-48, Schloss et al describes sending a message to prompt performance of an event such as administering medication to one or more patients, where the message details events. This represents the process instance. In addition, col. 7, lines 55-59 shows that when event groups are created, they are linked to identifiers. This represents the process instance identifier.

As per claim 4, the applicant argues that the combination of Schloss et al and Judge et al fail to disclose "said particular instance of said first process comprises a particular use of said process for a specific patient" or the use of "an event identifier identifying" a "change in circumstances potentially affecting healthcare delivered to a patient" and that is "generated by a second process comprising a second set of tasks and including the activity of also receiving an identifier identifying a particular instance of said first process" comprising a "particular use of said process for a specific patient". However, the combination of Schloss et al and Judge et al disclose this feature. Specifically, Judge et al discloses this limitation in Col. 21, lines 36-45, where it is shown that data is used about particular patients to issue service requests. The event identifier is disclosed in col. 7, lines 55-59 as discussed above with respect to claim 3.

As per claim 7, the applicant argues that the combination of Schloss et al and Judge et al fail to disclose the following a "message" that "includes an event identifier identifying a target process to be replaced by a predetermined process comprising said particular tasks". However, the combination of Schloss et al and Judge et al discloses this feature. Specifically, Schloss et al discloses a message that sent before the performance of an event in col. 4, line 41-45. In addition, Schloss et al discloses that

each event in event group will require an identifier in col. 8, lines 21-22, and in Schloss et al, protocols are used which is defined as a process of more than one events and/or event groups that are logically related and performed to achieve a purpose. Therefore, since each event requires an identifier, it is obvious to conclude that the process is identified as well. However, Judge et al was introduced to specifically show this limitation. Judge et al discloses a process identifier in col. 9, line 13, where a process ID is disclosed.

As per claim 8, the applicant argues that the combination of Schloss et al and Judge et al fail to disclose "searching a database containing records indicating active processes and process instances to identify active process instances of said target process to be replaced". However Schloss alone discloses this limitation in col. 5, lines 29-30, where orders are sent to the database to add, remove or modify events.

As per claim 15, the applicant argues that the combination of Schloss et al and Judge et al fail to disclose "replacing scheduling of performance of another process with said scheduling of performance of said identified process". However, Schloss et al discloses that each event in event group will require an identifier in col. 8, lines 21-22 discloses events part of an event group that require an identifier to schedule an event in col. 8, lines 21-22, and in Col. 8, lines 27-29, an event containing pointers to immediately previous events. Since these events contain pointers to immediately previous events, it is obvious to conclude that the events are replaced by previous events, which are scheduled to be performed.

As per claim 16, this claim is rejected for the same reasons as disclosed with respect to claim 7.

As per claim 17, the applicant argues that the combination of Schloss et al and Judge et al fail to disclose "searching a database containing records indicating active processes and process instances to identify active process instances of said target to be replaced. This claim is still rejected for the same reasons as set forth above with respect to claim 8.

As per claim 18, the applicant argues that the combination of Schloss et al and Judge et al fail to disclose "receiving information identifying active process instances and storing records in a database indicating said identified active process instances". However, Schloss et al discloses that orders are sent to a database that contains events and event groups for adding, removing or modifying events in col. 5, lines 29-30. Since these orders are sent to the database and processed, it is inherent that this information is also stored in the database.

As per claim 24, this claim is rejected for the same reasons as discussed above with respect to claims 20, 3, 7, 8 and 17.

As per claim 25, this claim is rejected for the same reasons as discussed above with respect to claims 20, 3, 7, 8 and 17.

As per claim 5, the applicant argues that the combination of Schloss et al and Judge et al fail to disclose "filtering a plurality of received messages to identify said message identifying occurrence of an event potentially affecting healthcare delivered to a patient and excluding other messages immaterial to said healthcare delivered to said

patient". However, the combination of Schloss et al and Wright et al disclose this feature. Specifically, Wright et al discloses this feature in col. 42, lines 37-41, where filtering during processing of a query where events are prioritized. Wright does define events as the "event type is the type of class of event, and the event identifier is the event that occurred". In this case, the event has occurred. In addition, in Col. 110, lines 11-15, Wright discloses that in a specific case, each event log specifies an event messages definition file. Therefore in Wright, there are specific messages that identify the occurrence of an event.

As per claim 14, this claim is rejected for the same reasons as discussed above with respect to claims 11 and 5.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akiba K Robinson-Boyce whose telephone number is 571-272-6734. The examiner can normally be reached on Monday-Tuesday 8:30am-5pm, and Wednesday, 8:30 am-12:30 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on 571-272-6812. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7238 [After final communications, labeled "Box AF"], 703-746-7239 [Official Communications], and 703-746-7150 [Informal/Draft Communications, labeled "PROPOSED" or "DRAFT"].

Art Unit: 3639

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



A. R. B.  
May 10, 2005



THOMAS A. DIXON  
PRIMARY EXAMINER